

**Application for Certification as an Eligible Energy Resource Under the  
Delaware Renewable Energy Portfolio Standard**

1. Name of Facility  
Raman's residence

2. Facility Address  
22 Silver Lake Dr, Middletown, DE 19709

Is the facility located within the PJM control area?

☒ Yes

☐ No

If No, does the Facility have import capabilities<sup>1</sup>?

☐ Yes

☐ No

3. Name of Owner  
Nandikkara V Raman

4. Mailing Address  
22 Silver Lake Dr, Middletown, DE 19709

Phone 302 373 0977 Fax \_\_\_\_\_

Email ramannv@hotmail.com

5. Name of Operator  
Nandikkara V Raman  
Mailing Address  
22 Silver Lake Dr, Middletown, DE 19709  
Phone 302 373 0977 Fax \_\_\_\_\_

Email ramannv@hotmail.com

6. Name of Contact Person  
Nandikkara V Raman  
Mailing Address - 22 Silver Lake Dr, Middletown, DE 19709

<sup>1</sup> Documentation will be required to substantiate import capabilities into PJM

\_\_\_\_\_  
\_\_\_\_\_  
Phone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

7. Name of REC/SREC Owner

NANDIKKAR V RAMAN

Mailing Address

22 SILVER LAKE DR

MIDDLETOWN DE 19709

Phone 302-373-0977 Fax \_\_\_\_\_

Email RAMANNV@HOTMAIL.COM

8. List all PJM-EIS GATS State Certification Numbers assigned to this facility:

NONE

9. Operational Characteristics:

Fuel Types Used (check all that apply):

☐ Gas combustion from the anaerobic digestion of organic material

☐ Geothermal

☐ Ocean, wave or tidal actions, currents, or thermal differences

☐ Qualified Biomass<sup>i</sup>

☐ Qualified Fuel Cells<sup>ii</sup>

☐ Qualified Hydroelectric<sup>iii</sup>

☐ Qualified Methane Gas captured from a landfill gas recovery system<sup>iv</sup>

☒ Solar

☐ Wind

If co-firing, provide the formula on file with PJM Environmental Information Services, Inc. (PJM-EIS) \_\_\_\_\_

Rated Capacity (in megawatts - DC) 0.0091

If multiple fuel types are utilized, attach the formula for computing the portion of output per fuel type by megawatts per hour generated.

Facility **Final Approved Interconnection Date** 09/18/18

If co-firing with fossil fuels, co-fire start date \_\_\_\_\_

If co-firing with fossil fuels, attach the allocation formula on file with PJM.

10. Is the Applicant's facility customer-sited generation<sup>v</sup>?

☒ Yes ☐ No

Is the Applicant's facility a community owned generating facility<sup>vi</sup>?

☐ Yes ☒ No

Can the output from the customer-sited generation be appropriately metered?

☒ Yes ☐ No

11. If the Applicant's installation is solar or wind sited in Delaware, is a minimum of 50% of the cost of the renewable energy equipment, inclusive of mounting components, manufactured in Delaware?

☐ Yes\* ☒ No

*Cathy Hamilton*

\_\_\_\_ Tesla Energy Operations, Inc. \_\_\_\_\_  
Company Name of Installer Signature of Company Representative

\_\_\_\_ 12832 South Frontrunner Blvd \_\_\_\_\_  
Address Carly Hamilton  
\_\_\_\_ Draper, UT 84020 \_\_\_\_\_  
Address Print Name of Company Representative

**\*If Yes, please attach the following documentation:**

- A copy of the supplier's invoice showing Delaware manufactured equipment with this facility identified
  - If the supplier's invoice shows only a coded Purchase Order (PO) number, a copy of the company's matching PO that includes the address where the materials were used/installed, must also be supplied
  - If using a master invoice, a record of the draws against the purchased quantity, on the master invoice, must show the address of each use and the quantity of material used

**12. If the Applicant's installation is solar or wind sited in Delaware:**

- a. Was the facility physically constructed or installed with a workforce that consists of at least 75% Delaware residents?

☐ Yes\*      ☒ No

- b. Does the installing company employ, in total, a minimum of 75% workers who are Delaware residents?

☐ Yes\*      ☒ No

\_\_\_\_ Tesla Energy Operations, Inc. \_\_\_\_\_  
Company Name of Installer Signature of Company Representative


\_\_\_\_ 12832 South Frontrunner Blvd \_\_\_\_\_  
Address Carly Hamilton  
\_\_\_\_ Draper, UT 84020 \_\_\_\_\_  
Address Print Name of Company Representative

**\*If Yes, please attach supporting documentation (see pages 7-8 for details). Please note, in order to qualify for the Labor/Workforce Bonus, at least one of the options (a. or b.) must be met.**

NANDIKKARA V RAMAN

I, \_\_\_\_\_ (print name) hereby certify under penalty of perjury that

1. I have made reasonable inquiry, and the information contained in this Application is true and correct to the best of my knowledge, information and belief.
2. I am authorized to submit and execute this Application and to bind myself and/or my company to the representations contained herein.
3. I /my company agree(s) to comply with and be subject to the jurisdiction of the Public Service Commission of the State of Delaware for any matters arising out of my submission of this Application or the granting of the Application.
4. In the event that any of the information contained in this Application changes pending the consideration of this Application or after the Application is granted, I/my company will amend the Application to provide the Commission with such changed information.
5. I acknowledge that if any of the representations made in this Application or in any amendment thereto are found to be untrue when made, I/the company may be subject to sanctions, including but not limited to monetary fines and/or the revocation of any Certificate granted as a result of the representations made in this Application.

Signature: NANDIKKARA V RAMAN 

Date: 2/9/2019

**Required Documentation:**

## **Municipality Generator Interconnection Application -Short Form**

### **Part II - Final As-Built Details**

A single customer interconnecting to a single meter at a single premise provides Final As-Built Details this date \_\_\_\_\_ to the Municipality of Town of Middletown, to install and operate a generating facility interconnected with the Municipal's utility system.

#### **Section 9. Installation Details**

Generating System was installed by: ☐ Owner ☒ State Licensed Electrician

Installing Electrician: \_\_\_\_\_ Firm: Tesla Energy Operations, Inc. License No.: \_\_\_\_\_

Mailing Address: 6671 Las Vegas Blvd South, Suite 200

City: Las Vegas State: NV Zip Code: 89119

Telephone: Area Code: 702 Number: 703-8951

Installation Completion Date: \_\_\_\_\_ Interconnection Date: \_\_\_\_\_  
(System connected but shall not be active/live.  
System not approved by Utility at this point.)

Supply certification that the generating system has been installed and inspected in compliance with the local Building/Electrical code of the municipality of Town of Middletown.

Signed (Inspector): please see attached final inspection cert Date: \_\_\_\_\_  
(in lieu of signature of Inspector, a copy of the final inspection certificate may be attached)

#### **Generator Technical Information**

The applicant certifies that the system described below is the Final As-Built Design and does match any revised application submitted by the applicant and approved by the municipality prior to the interconnection date.

Generator Equipment and Operation Details (If multiple different products are used please detail)

Generator Manufacturer:	<b>Panasonic</b>
Generator Model Name:	<b>SolarCity Standard: SC325</b>
Generator Model Number:	
Generator Output (kW):	<b>9.10</b>
Inverter Manufacturer:	<b>Delta</b>
Inverter Model Name:	<b>Delta Solivia 5.2 TL RGM Delta Solivia 5.2 TL RGM</b>
Inverter Model Number:	
Inverter Power Rating (AC Watts):	<b>10.40 kW</b>



Number of Inverters:	2
Inverter Efficiency %:	97.5
Intended Inverter Location:	Outdoor
System Rated Output (Generator Output x Inverter Efficiency)	8.37
If Generator is Photovoltaic include as well:	
Module Power Rating (DC @ STC): Should match Generator Output (kW)	9.10
Number of Modules:	28
Total Solar Output kW (Modules x Power Rating DC @ STC):	8.37
Array Orientation (degrees): Note size of each array with different degrees.	105, 195, 105, 285
Array Tilt (degrees): Note size of each array with different degrees.	23, 35, 23, 23
<b>Required: Completed Generator Installation Pictures Attached: Must show whole generator, inverters, electric permits</b>	



### Section 10. Applicant Certifications

I hereby certify that, to the best of my knowledge, all the information provided in the Final As-Built Details is true and correct. I agree to install a Warning Label provided by the Municipality on or near my service meter location. I also agree to submit a new or revised Interconnection Application and comply with all governing permitting requirements before adding to in any way or subtract from in any way the current approved electric generating system; including but not limited to expanding, replacing, or removing all or a portion of the current system, adding a new generator type, and/or replacing in anyway the generator system inverter. I further agree to notify the utility in writing through official certified mail at least 30 days before I sell or transfer ownership of the system to another owner to allow the municipal electric utility to update records and determine if the new owner agrees to the generation and interconnection responsibilities associated with the transfer of ownership. A new property owner, of property that up until the time of sale had an approved Interconnection Agreement in place for net-metering, has 30 days to submit a new Interconnection Agreement for net-metering in his/her name. If the new owner fails to submit an Interconnection Agreement within 30 days of property transfer, certain net-metering transfer rights may be discontinued.

Failure for non-compliance to these certifications will be considered a violation of the net-metering agreement and may result in the disconnection of the electric generator at the discretion of the municipal electric utility. The sale or transfer of the electric generator shall not compromise law.

I further certify and understand that municipal utility review and approval of this application does not constitute an endorsement of actual equipment performance nor does it endorse its benefits or economics.

Signature of Applicant: \_\_\_\_\_

*[Signature]*

Date: \_\_\_\_\_

5/24/18

Print Name: Nandikkara Raman

Call your municipal electric service to find out who should receive this Part II Interconnection Application. Make sure to include all application sections (9 – 12) with final submissions.

### Section 11. Final Approval or Non-Approval for Interconnection and System Operation

The Municipal Utility: ☒ Approves ☐ Does NOT Approve

The interconnection of a Solar generator as detailed in the Final As-Built Details and located at (installation address) 22 Silver Lake Dr.

The Municipal Utility has verified the applicant's average electric consumption in Appendix A. ☒ Yes ☐ No

The Municipal Utility has verified at the time of installation that the installed electric generator is designed to produce no more than 110% of the applicant's/customer's average annual electric consumption as calculated in Appendix A. ☒ Yes ☐ No

Signed (Municipal Utility): Christopher N Pierce Date: 9-11-2018

Print Name & Title: Christopher N Pierce

Reason of Not Approving: \_\_\_\_\_





**Approval to connect to the municipal system indicates only that the minimum requirements for a safe proper interconnection have been satisfied. Such approval does not imply that the Generator Owner's facility meets all federal, state and local standards or regulations.**

**Section 12. Municipal Internal Notifications**

Send Applicant Warning Label for installing on/ near service meter: ☐ Yes

Notify Billing Dept. of Interconnected Generation: ☐ Yes

Notify District Engineering of Interconnected Generation: ☐ Yes

Notify System Protection of Interconnected Generation: ☐ Yes

Notify Municipal Building Department: ☐ Yes

**A copy of the approved Part II Final As-Built Details must be sent to the Delaware Municipal Electric Corporation ("DEMEC").** ☐ Yes

**DEMEC  
P.O. Box 310  
Smyrna, DE 19977**





**First State Inspection Agency, Inc.**  
**1001 Mattlind Way**  
**Milford, DE 19963**

**1-800-468-7338**  
**302-422-3859**

Solar City Corporation  
Attention: Accts. Payable  
6671 Las Vegas Blvd. S, #300  
Las Vegas, NV 89119

## **CERTIFICATE**

Final Inspection Date: 8/31/2018  
Application #: 51296  
Owner: N. Raman  
Customer Job #:   
Occupancy: Solar 9.1 KW  
Location: 22 Silver Lake Dr Middletown, De  
New Castle County

This certifies that the installation of electrical equipment listed on referenced application has been approved as meeting the requirements of the National Electric Code, utility, municipalities and Agency rules. Any modification, addition or alteration of the electrical system, after the date of final inspection, will require a new application for inspections and certifications.

  
**Chief Electrical Inspector**

F.S. CERT

**Report Title:** Incident Details  
**Run Date and Time:** 2018-09-19 08:03:59 Pacific Daylight Time  
**Run By:** Gilbert Diaz  
**Table name:** incident

Incident			
Number:	INC3344901	Opened:	2018-09-18 04:45:11
Caller:	Guest	Opened by:	Guest
Caller Location:	NA-US-CA-Fremont-901 Page	Contact type:	Email
Incident Location:		Incident state:	Active
Business service:		Assignment group:	Energy Interconnection
Configuration item:		Assigned to:	Gilbert Diaz
Category:	Energy Interconnection	Request:	false
Subcategory 1:		Problem:	
Subcategory 2:		Watch list:	CPierce@middletownde.org
Subcategory 3:		Outage Subscribers:	
Data Center Location:		SOX1 Flag:	
Impact:	3 - Low	SOX2 Flag:	
Urgency:	2 - Medium	Vendor Name:	
Priority:	P4 - Low	CMN Issues:	
vendor:	No	To Emails:	interconnection.de@tesla.com
ServerVirtualization WL Flag:			
Response Time:			
RTIME:			
Resolver Open:			
Created:	2018-09-18 04:45:11		

## Short description:

RE: Interconnection Application for Raman at 22 Silver Lake Dr, Middletown, DE 19709, Part 2

## Incident Description:

Please find the attached

Please note that the Town of Middletown will no longer reimburse the consumer for electric production over 100% of the yearly consumption. The Town has exceeded the 5% total aggregated load. However if the aggregated load drops below 5% the reimbursements may resume.

According to 26 Del. C. § 1014 (e)(7):

(7) If the total generating capacity of all customer-generation using net metering systems served by an electric utility exceeds 5% of the capacity necessary to meet the electric utility's aggregated customer monthly peak demand for a particular calendar year, the electric utility may elect not to provide net metering services to any additional customer-generators.

Christopher N Pierce  
Meter Foreman  
Town of Middletown  
431 Haveg Rd.  
Middletown, De. 19709  
(p) 302-378-5677

From: [https://urldefense.proofpoint.com/v2/url?u=http-3A\\_\\_interconnection.DE&d=DwlGaQ&c=m5pJjvhoJ8du6Q8es33zcrIMoqSJBzBMtZh4icn4nJ8&r=d0Wgja7k5p5VgVmz\\_dIM48Ba64XR5DmgRNcsV7QXe5U&m=1fhApWb6H80RfhXRaG1WCzbwgb5F\\_sREpZkq-gl9sl&s=jo3QrTgT0B1HSPCJcuL6H3Iwa7554E18LKy-HyeoPek&e=<interconnection.de@tesla.com>](https://urldefense.proofpoint.com/v2/url?u=http-3A__interconnection.DE&d=DwlGaQ&c=m5pJjvhoJ8du6Q8es33zcrIMoqSJBzBMtZh4icn4nJ8&r=d0Wgja7k5p5VgVmz_dIM48Ba64XR5DmgRNcsV7QXe5U&m=1fhApWb6H80RfhXRaG1WCzbwgb5F_sREpZkq-gl9sl&s=jo3QrTgT0B1HSPCJcuL6H3Iwa7554E18LKy-HyeoPek&e=<interconnection.de@tesla.com>)  
Sent: Tuesday, September 4, 2018 12:27 PM  
To: Chris Pierce <CPierce@middletownde.org>  
Subject: Interconnection Application for Raman at 22 Silver Lake Dr, Middletown, DE 19709, Part 2

Hello,

Attached are the following documents for the proposed PV system at 22 Silver Lake Dr, Middletown, DE 19709

- Page 2 of the Generator Interconnection Application
- Electrical Inspection Certificate/UCC

Thank you,

Gilbert Diaz | Interconnection Specialist, Utility Team  
6611 S Las Vegas Blvd, Las Vegas, NV 89119  
p. (888) 765-2488 | m. (888) 765-2488 | [gidiaz@tesla.com](mailto:gidiaz@tesla.com) <<mailto:gidiaz@tesla.com>>

[cid:image002.png@01D3CBEF.F8EB9F90] <<http://www.tesla.com/>> [cid:image004.png@01D3CBEF.F8EB9F90]  
<[https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_twitter.com\\_tesla&d=DwlGaQ&c=m5pJjvhoJ8du6Q8es33zcrIMoqSJBzBMtZh4icn4nJ8&r=d0Wgja7k5p5VgVmz\\_dIM48Ba64XR5DmgRNcsV7QXe5U&m=1fhApWb6H80RfhXRaG1WCzbwgb5F\\_sREpZkq-gl9sl&s=x6WZ5929cuELRE-w3w2A3VFFTyX-WVqsyvMnAgwWmrM&e=>](https://urldefense.proofpoint.com/v2/url?u=https-3A__twitter.com_tesla&d=DwlGaQ&c=m5pJjvhoJ8du6Q8es33zcrIMoqSJBzBMtZh4icn4nJ8&r=d0Wgja7k5p5VgVmz_dIM48Ba64XR5DmgRNcsV7QXe5U&m=1fhApWb6H80RfhXRaG1WCzbwgb5F_sREpZkq-gl9sl&s=x6WZ5929cuELRE-w3w2A3VFFTyX-WVqsyvMnAgwWmrM&e=>)>  
[cid:image006.png@01D3CBEF.F8EB9F90] <[https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_www.youtube.com\\_channel\\_UC5WjFrtBdufl6CZojX3D8dQ&d=DwlGaQ&c=m5pJjvhoJ8du6Q8es33zcrIMoqSJBzBMtZh4icn4nJ8&r=d0Wgja7k5p5VgVmz\\_dIM48Ba64XR5DmgRNcsV7QXe5U&m=1fhApWb6H80RfhXRaG1WCzbwgb5F\\_sREpZkq-gl9sl&s=WgTTVA1rUm\\_D8Ykor8NTCw6zUHXPhlsyMlRY3bRjGE&e=>](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.youtube.com_channel_UC5WjFrtBdufl6CZojX3D8dQ&d=DwlGaQ&c=m5pJjvhoJ8du6Q8es33zcrIMoqSJBzBMtZh4icn4nJ8&r=d0Wgja7k5p5VgVmz_dIM48Ba64XR5DmgRNcsV7QXe5U&m=1fhApWb6H80RfhXRaG1WCzbwgb5F_sREpZkq-gl9sl&s=WgTTVA1rUm_D8Ykor8NTCw6zUHXPhlsyMlRY3bRjGE&e=>)> [cid:image008.png@01D3CBEF.F8EB9F90]  
<[https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_www.instagram.com\\_teslamotors\\_&d=DwlGaQ&c=m5pJjvhoJ8du6Q8es33zcrIMoqSJBzBMtZh4icn4nJ8&r=d0Wgja7k5p5VgVmz\\_dIM48Ba64XR5DmgRNcsV7QXe5U&m=1fhApWb6H80RfhXRaG1WCzbwgb5F\\_sREpZkq-gl9sl&s=vmaqBlnSLGAQnxuz93I\\_qAYaTM4twdyVmwyU\\_jrefY&e=>](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.instagram.com_teslamotors_&d=DwlGaQ&c=m5pJjvhoJ8du6Q8es33zcrIMoqSJBzBMtZh4icn4nJ8&r=d0Wgja7k5p5VgVmz_dIM48Ba64XR5DmgRNcsV7QXe5U&m=1fhApWb6H80RfhXRaG1WCzbwgb5F_sREpZkq-gl9sl&s=vmaqBlnSLGAQnxuz93I_qAYaTM4twdyVmwyU_jrefY&e=>)>  
[cid:image010.png@01D3CBEF.F8EB9F90] <[https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_www.linkedin.com\\_company\\_tesla-2Dmotors\\_&d=DwlGaQ&c=m5pJjvhoJ8du6Q8es33zcrIMoqSJBzBMtZh4icn4nJ8&r=d0Wgja7k5p5VgVmz\\_dIM48Ba64XR5DmgRNcsV7QXe5U&m=1fhApWb6H80RfhXRaG1WCzbwgb5F\\_sREpZkq-gl9sl&s=AwAR5OG7Y\\_x08nvZtV-T1GX4IQEIVhdwHYizDGnEWtk&e=>](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.linkedin.com_company_tesla-2Dmotors_&d=DwlGaQ&c=m5pJjvhoJ8du6Q8es33zcrIMoqSJBzBMtZh4icn4nJ8&r=d0Wgja7k5p5VgVmz_dIM48Ba64XR5DmgRNcsV7QXe5U&m=1fhApWb6H80RfhXRaG1WCzbwgb5F_sREpZkq-gl9sl&s=AwAR5OG7Y_x08nvZtV-T1GX4IQEIVhdwHYizDGnEWtk&e=>)>

## Notes

## Additional comments:

2018-09-18 04:45:11 - Guest (Additional comments)  
received from: CPierce@middletownde.org

## Work notes:

## Outage Notification Summary:

## Closure Information

Knowledge: false

Resolved by:

Resolution code:

Resolved:

Close notes:

## Related Records

Parent Incident:

Change Request:

Problem(u\_problem):

Caused by Change:

**Related List Title:** Task SLA List  
**Table name:** task\_sla  
**Query Condition:** Task = INC3344901  
**Sort Order:** None

2 Task SLAs

SLA	Type	Stage	Has breached	Start time	Stop time	Actual elapsed time	Actual elapsed percentage
Priority 4 Incident Resolution	SLA	In progress	false	2018-09-18 04:45:11		1 Day 15 Minutes	33.69
Priority 4 Incident Response	SLA	Completed	false	2018-09-18 04:45:11	2018-09-18 05:17:31	32 Minutes	4.49